	Document and Data Control	IVV 05 Revision: L Effective Date: May 2003
Independent Verification & Validation Facility		

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APPROVAL SIGNATURES		DATE
Gregory Blaney (original signature on file)	QMS Management Representative	05/15/03

REVISION HISTORY			
Rev. No.	Description of Change	Author	Effective Date
Basic	Initial Release	John Griggs IT/204	01/29/98
A	Adopted Ames Format	John Griggs IT/204	04/30/98
B	Format Correction	John Griggs IT/204	05/27/98
C	Quality Record Format Change, Section 2.0 and Section 8.0 modified	John Griggs IT/204	08/26/98
D	Format Changes	John Griggs IT/204	09/11/98
E	Addition of references to the related SLPs and reordering of flowcharts	John Griggs IT/204	04/15/99
F	References to Ames Quality Manual replaced with reference to IV&V Facility Quality Manual	John Griggs IT/204	09/10/99
G	Format and Number changes; Delete Reference to Ames Research Center	John Griggs IT/204	11/17/00
H	Delete reference to AMES SLP, and minor editorial	Griggs	08/29/01
I	Clarify Master List, Definitions (PAR 2002-P-26)	Griggs	10/17/02
J	Remove reference between the numbering system for IV&V and the ISO standard	Griggs	11/04/02
K	Remove reference to IS 8204; add new requirement by clause 4.2.3.b	Griggs	03/05/03

L	Updated flowcharts and process flow to meet the revised DCR process/form; used template 5-2	Griggs	05/16/03

REFERENCE DOCUMENTS	
Document Number	Document Title
IVV QM	IV&V Facility Quality Manual
IVV 05-2	Preparation of SLP
IVV 05-3	Preparation of WI
IVV 16	Quality Records

1.0 Purpose

The purpose of this System Level Procedure (SLP) is to establish a consistent method for preparation, approval, issuance, revision, tracking, and maintenance of the Independent Verification and Validation (IV&V) Facility Quality Management System controlled documentation and data.

2.0 Scope

This procedure is applicable to all documentation and data which pertain to the IV&V ISO 9001 Quality Management System. This includes all SLPs, Work Instructions (WIs) and quality records. External documents are controlled by this procedure to the extent applicable in the processing of a quality product.

3.0 Definitions and Acronyms

Document Control Custodian (DCC)*: An individual or alternate responsible for creating, processing, and maintaining the record of Document Change Request(s). Annually, the DCC will initiate a Preventative Action Request to each Process Owner requiring that they review their process documents for needed changes.
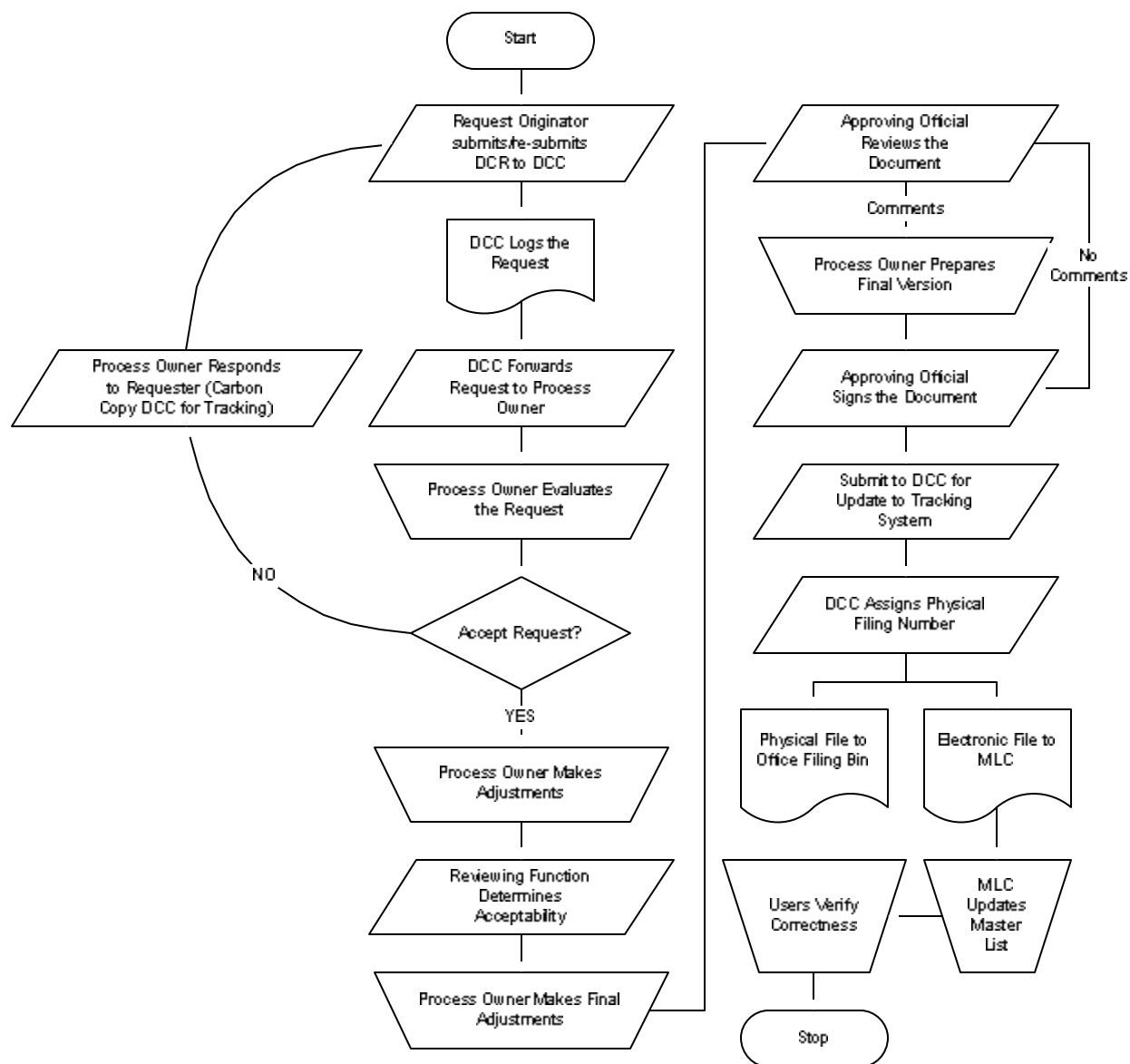
Master List Custodian (MLC)*: An individual or alternate responsible for creating and updating the IV&V Facility Master List of ISO documents.

Process Owner: A NASA civil servant assigned by management to be the lead of an established Facility System Level Procedure whose job duties are related to the procedure. Annually, each Process Owner is responsible for reviewing their process document for adequacy, accuracy, and currency; this will be in response to a PAR initiated by the DCC.

Request Originator: A process user or owner recommending a change or addition to any documentation comprising the Facility's Quality Management System.

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* See ISO 9000 Web Site "Who's Who" for names.

4.0   Flow Chart

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                              ( Start )
                                 |
Request Originator          Approving Official
submits/re-submits          Reviews the
DCR to DCC                  Document
     |                           |  Comments
DCC Logs the                Process Owner Prepares
Request                     Final Version
     |                           |
Process Owner Responds      DCC Forwards          Approving Official
to Requester (Carbon        Request to Process    Signs the Document
Copy DCC for Tracking)      Owner                      |
                                 |                Submit to DCC for
                            Process Owner Evaluates Update to Tracking
                            the Request            System
                                 |                     |
                            Accept Request?       DCC Assigns Physical
                            NO / YES              Filing Number
                                 |                  /        \
                            Process Owner Makes  Physical File to  Electronic File to
                            Adjustments          Office Filing Bin  MLC
                                 |                     |              |
                            Reviewing Function   Users Verify    MLC
                            Determines           Correctness     Updates
                            Acceptability             |          Master List
                                 |                 ( Stop )
                            Process Owner Makes Final
                            Adjustments
```

5.0   Responsibilities

Responsibilities for this SLP are defined within Section 3.0 Definitions and Section 6.0 Procedure.

6.0   Procedure

This section details the types and methods for working continuously with the Quality Management Systems Documentation.

6.1   New Documents and Changes

This section covers System Level Procedures and Work Instructions.

6.1.1 Initiating
This section describes entity duties with respect to this process phase.

Request Originator
- Complete IVV Form 1000, Document Change Request, for issuance or revision of a document, clearly identifying requested changes (forward to the DCC).

6.1.2 Processing

This section describes entity duties with respect to this process phase.

Document Control Custodian
- Logs and tracks the request (forward to Process Owner).

Process Owner
- Determine applicability and acceptability of the requested DCR and incorporate changes for review.
- If necessary, forward a copy clearly marked "Review Copy" to each reviewer and to the DCR Originator.

- If the request is declined or incomplete, use From 1000 to respond to the Originator, carbon copy the DCC for tracking, and explain the reason for rejection.

Request Originator
- Re-submit requests, if deemed necessary, with additional information if the original request was not accepted by the Process Owner.

6.1.3 Reviewing

This section describes entity duties with respect to this process phase.

Reviewing Functions
- Review the changes made to the document and indicates approval by signing Form 1000 and returning the form to the applicable Process Owner.
- If consensus cannot be reached, seek resolution by the process owner.

Process Owner
- Upon receiving approval from the Reviewing Function, forward the approved draft of the new document to the DCC for further processing and distribution.

Approving Official
- Approves, approves with comments, or does not approve changes made to the document by signature (forward approval DCRs to the DCC for further processing).

6.1.4 Final Processing

This section describes entity duties with respect to this process phase.

Document Control Custodian
- Updates the tracking system, assigns a physical filing number, and delivers the signed DCR and copy of the final

document to the front office for filing (forward electronic version to MLC).
- Make a hard-copy of the Master List in case the electronic is unavailable.

Master List Custodian
- Identifies new revision letters to updated documents and uses "Basic" for new documents to update the Master List.
- Notify users of updates to the documents.

6.2 Cancellation

Documents which are no longer required or which are superseded by documents with different numbers will be cancelled as follows:

Request Originator/Process Owner
- Request, via the Form 1000, cancellation of documents.

Process Owner and DCC
- Process and review cancellations using the procedures for change requests.

Process Owner
- When the cancellation has been approved, issue a cancellation notice to the DCC and MLC.

Master List Custodian
- Remove the entry from the Master List for the document being cancelled.
- Notify process users of cancellation.

Document Users
- Mark all copies as "Obsolete/Reference Only".

6.3 Controlled Versions

The following procedures apply to all levels of Quality Management System documents.

6.3.1 Electronic

Electronic versions made available through the ISO 9000 electronic repository are the official controlled versions. Copies printed from these versions are considered uncontrolled and must bear the notice, "Verify that this is the correct revision before use."

Document Control Custodian
- Verify that posted documents match the current Master List and resolve any discrepancy by audit of Master List revisions and DCR log.

Master List Custodian
- When posting revised documents to organization's electronic repository, remove obsolete versions.

Document Users
- Verify the correctness of printed copies by checking revision status on the Master List or by contacting the MLC.
- DO NOT mark up printed hard-copies unless they are marked "Review Draft."

6.3.2 Non-Electronic

The official controlled version of any Quality System document that is not available through the ISO 9000 electronic repository is the one shown on the Master List.

6.4 Controlling External Changes

Selected industry standards and specifications as well as military standards and specifications are available, full-text, in the IV&V Facility Technical Library. Standards and specifications applicable to a project must appear on individual project master lists. Individual users must verify that the versions in use at their workstations are current for their project.

NASA Policy Directives (NPDs) and NASA Procedures and Guidelines (NPGs) are available, electronically, from the NODIS repository.

6.4.1 Process

The following procedures apply to all organizations that use external documents in their system tasks.

Process Owner
- Include on masters lists all external documents used in quality system activities.
- If only current versions of external documents are applicable, include only the source for verifying current versions (e.g. publisher or document originator) on the individual project master list.
- If previous versions are applicable, include specific revisions and dates.

Document Users
- Verify correctness of document versions on appropriate master lists or through the source noted on the master list.

6.5 Data

Each project will act as the repository for its own data and will define data control procedures that ensure the data is maintained, archived, and controlled appropriately.

Process Owner
- Establish procedures for control of data that include such elements as identification, maintenance, revision, release, review, and approval.
- Maintain integrity of data sets received from the programs for analysis.
- Maintain traceability from reports to the data set(s) the analysis is based upon.
- Maintain approval control for those authorized to enter data into master databases(s) and reports.

6.6 Forms

Unique forms required for conducting IV&V Facility business shall be controlled by the document control process as outlined in this SLP.

Process Owner
- Define the need for form revision or replacement
- Define the content, use, and instructions of the form.
- Create the draft form.
- Initiate the DCR (IVV Form 1000), listing document(s) affected, and forwards to the DCC.
- Convene a review group on the affected function(s). During the review, the affected function or form is approved or disapproved by comment.
- If disapproved, return notice to the DCC for log tracking. The Process Owner then reconsiders the affected function or form and resubmits as appropriate.
- If approved, forward the document to the DCC for further processing.

Document Control Custodian
- For tracking, log DCR with draft and supporting materials.
- Forward the form to the Process Owner.
- If the review turned out in disapproval, log the file comments package.
- If the review turned out in approval, log the file comments package and forward the final form to the MLC.

Master List Custodian
- Number the form.
- Update the Master Forms List.
- Enter from and instructions into the ISO electronic repository.

Cancellation
- IV&V Facility forms will be cancelled using the process for document cancellation (see section 6.2).

6.7   Contingency Plan

If the ISO 9000 electronic repository file is temporarily inaccessible, contact the MLC to determine the current revision of documents and forms.

7.0   Metrics

There are no metrics for the IVV 05 procedure.

8.0   Records

The configuration organization, DCC, will retain document change requests, document change logs, records of reviews, and signature pages or other evidence of approval for release of documents and changes thereto in accordance with SLP 4.16, Quality Records.   See IVV 05-1 for retention requirements.

IVV Form 1000, Document Change Request will be used to change SLPs, WIs, and IVV forms into the IV&V Quality System. Document change requests will be log numbered sequentially as DCR 1 through X.

IVV Master List will contain the following data on each document: Document Number, Document Title, Document Revision Letter, Effective Date, Process Owner, Approving Official, and DCR Number. The Master List will also carry a revision date. The IV&V QMS Document numbers are not directly related to the ISO standard numbering. The Quality Manual contains a matrix referring the IV&V QMS processes to the requirements of the standard.